

the angle of the chains must not exceed 45 degrees from the horizontal.

**Subpart J—Frames, Cab and Body Components, Wheels, Steering, and Suspension Systems**

SOURCE: 53 FR 49402, Dec. 7, 1988, unless otherwise noted.

**§ 393.201 Frames.**

- (a) The frame of every bus, truck, and truck tractor shall not be cracked, loose, sagging or broken.
- (b) Bolts or brackets securing the cab or the body of the vehicle to the frame must not be loose, broken, or missing.
- (c) The frame rail flanges between the axles shall not be bent, cut or notched, except as specified by the manufacturer.
- (d) All accessories mounted to the truck tractor frame must be bolted or riveted.
- (e) No holes shall be drilled in the top or bottom rail flanges, except as specified by the manufacturer.
- (f) Field repairs are allowed.

**§ 393.203 Cab and body components.**

- (a) The cab compartment doors or door parts used as an entrance or exist shall not be missing or broken. Doors shall not sag so that they cannot be properly opened or closed. No door shall be wired shut or otherwise secured in the closed position so that it cannot be readily opened. EXCEPTION: When the vehicle is loaded with pipe or bar stock that blocks the door and the cab has a roof exit.
- (b) Bolts or brackets securing the cab or the body of the vehicle to the frame shall not be loose, broken, or missing.
- (c) The hood must be securely fastened.
- (d) All seats must be securely mounted.
- (e) The front bumper must not be missing, loosely attached, or protruding beyond the confines of the vehicle so as to create a hazard.

**§ 393.205 Wheels.**

- (a) Wheels and rims shall not be cracked or broken.

(b) Stud or bolt holes on the wheels shall shall not be elongated (out of round).

(c) Nuts or bolts shall not be missing or loose.

**§ 393.207 Suspension systems.**

- (a) *Axles.* No axle positioning part shall be cracked, broken, loose or missing. All axles must be in proper alignment.
- (b) *Adjustable axles.* Adjustable axle assemblies shall not have locking pins missing or disengaged.
- (c) *Leaf springs.* No leaf spring shall be cracked, broken, or missing nor shifted out of position.
- (d) *Coil springs.* No coil spring shall be cracked or broken.
- (e) *Torsion bar.* No torsion bar or torsion bar suspension shall be cracked or broken.
- (f) *Air suspensions.* The air pressure regulator valve shall not allow air into the suspension system until at least 55 psi is in the braking system. The vehicle shall be level (not tilting to the left or right). Air leakage shall not be greater than 3 psi in a 5-minute time period when the vehicle's air pressure gauge shows normal operating pressure.

**§ 393.209 Steering wheel systems.**

- (a) The steering wheel shall be secured and must not have any spokes cracked through or missing.
- (b) The steering wheel lash shall not exceed the following parameters:

Steering wheel diameter	Manual steering system	Power steering system
16" or less .....	2"+	4½"+
18" .....	2¼"+	4¾"+
20" .....	2½"+	5¼"+
22" .....	2¾"+	5¾"+

- (c) *Steering column.* The steering column must be securely fastened.
- (d) *Steering system.* Universal joints shall not be worn, faulty or repaired by welding. The steering gear box shall not have loose or missing mounting bolts or cracks in the gear box or mounting brackets. The pitman arm on the steering gear output shaft shall not be loose. Steering wheels shall turn freely through the limit of travel in both directions.